Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

_____

Ex parte ANDREW PAUL CHAPPLE, JANE ANN JONES, JOHN LLOYD, ROB THIJSSEN, and SIMON MARINUS VEERMAN

_____

Appeal No. 2004-0149
Application No. 09/803,612

_____

ON BRIEF

_____

Before OWENS , WALTZ, and TIMM, Administrative Patent Judges.
WALTZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the primary examiner's final rejection of claims 1 through 14 and 16, which are the only claims remaining in this application. We have jurisdiction pursuant to 35 U.S.C. § 134.

`According to appellants, the invention is directed to a method of reducing dye fading in the laundering of fabrics bearing fadeable dyes in the presence of bleaching compositions, which method comprises contacting stained fabrics bearing fadeable dyes,

in a wash liquor, with a bleaching composition that contains a specified transition metal complex bleach catalyst (Brief, page 3). The bleaching of stains is accomplished with the catalyst in the presence of atmospheric oxygen without use of aldehydes, and is substantially devoid of peroxygen bleach or a peroxy-based or -generating bleach system (*id.*).

Appellants state that all claims stand or fall together (Brief, page 5). Therefore, according to the provisions of 37 CFR § 1.192(c)(7)(2000), we select independent claim 1 from each grouping of claims and decide every ground of rejection in this appeal on the basis of this claim alone. Illustrative claim 1 is reproduced below:

> 1. A method of reducing dye fading of fabrics in laundering of fabrics bearing fadeable dyes in the presence of bleaching compositions, comprising contacting stained fabrics bearing fadeable dyes, in a wash liquor, with a bleaching composition that comprises a bleach catalyst,
>
> wherein the bleach catalyst comprises an organic ligand which forms a complex with a transition metal, the complex catalysing bleaching of stains by atmospheric oxygen without use of aldehydes, and the composition allows at least 50% of any bleaching of the fabric to be effected by oxygen sourced from the air and is substantially devoid of peroxygen bleach or a peroxy-based or -generating bleach system.

The examiner relies upon the following references as support for the rejections on appeal:

Appel et al. (Appel) (filed Sep. 01, 1999)	6,242,409	Jun. 05, 2001
Feringa et al. (WO '628) (published International Application)	WO 95/34628	Dec. 21, 1995
Hermant et al. (WO '787) (published International Application)	WO 97/48787	Dec. 24, 1997

Claims 1, 2, 6-14 and 16 stand rejected under 35 U.S.C. § 103(a) as unpatentable over WO '628 or WO '787 (Answer, page 3). Claims 1-14 and 16 stand rejected under 35 U.S.C. § 102(e) as anticipated by Appel (*id.*).[1] We *affirm* all of the rejections on

[1]All of the rejections on appeal are stated "as set forth in prior Office Action, Paper No. 17." Answer, page 3. However, the final rejection, as set forth in Paper No. 17 dated Oct. 2, 2002, recites the rejections over WO '628, WO '787, and Appel but presents findings from Racherla (U.S. Patent No. 6,074,437). See Paper No. 17, pages 4-5. The examiner had previously stated that the rejections under sections 102 and 103 over Racherla "have been withdrawn." Paper No. 17, page 2. Furthermore, the examiner repeats the "withdrawn" rejection of claims 9 and 10 under section 103(a) over Racherla on page 5 of Paper No. 17. Appellants presented these contradictions to the examiner in their response dated Dec. 9, 2002, Paper No. 18. In the Advisory Action dated Dec. 23, 2002, Paper No. 19, the examiner clarified the final Office action by stating that all rejections over Racherla have been withdrawn. Appellants clearly have responded to the rejections the examiner meant to present in the final Office action (Brief, page 5, part VI). Therefore we consider the rejections presented above as the rejections on appeal, and consider <u>all</u> rejections based on Racherla as withdrawn. We also consider the examiner's factual findings as set forth in Paper
(continued...)

appeal essentially for the reasons stated in the Answer and those reasons set forth below.

OPINION

A. The Rejection over WO '628 or WO '787

The examiner finds that both WO '628 and WO '787 disclose bleach catalysts within the scope of the claimed bleach catalyst, where these metal complex catalysts activate hydrogen peroxide, peroxy acids, or molecular oxygen, useful for the washing and bleaching of laundry (see Paper No. 4, pages 6-8). The examiner asserts that there would be no difference between bleaching using molecular oxygen as taught by these references and the use of atmospheric oxygen as recited by the claims on appeal (*id.* at page 7; Answer, page 4). The examiner also construes the claimed term "substantially devoid" of peroxy-bleaching agents as allowing up to 50% by molar weight on an oxygen basis of peroxygen bleach or peroxy-based or -generating systems (Answer, page 4, citing the specification, page 23, ll. 20-30).[2] The examiner further finds

[1](...continued)
No. 4 dated Jun. 19, 2001, as clarified in the action dated Dec. 4, 2001, Paper No. 9, and as incorporated into Paper No. 17 (see page 4).

[2]We do not find appellants' definition of "substantially devoid" on page 23 of appellants' specification. We do find the (continued...)

that WO '628 and WO '787 both are directed to laundry bleaching compositions having "remarkable dye transfer inhibition properties" which would have suggested use with fabrics bearing fadeable dyes to one of ordinary skill in this art (Answer, page 3). We agree.

Appellants argue that an "essential element" of the claims is the presence of a fabric with a fadeable dye and none of the references disclose any dye fading problem nor this essential element. This argument is not well taken since both references disclose that dye transfer is "a well-known problem in the art" (WO '628, page 2, ll. 10-16; WO '787, page 2, ll. 10-16). Additionally, both references teach that the metal complex bleaching catalyst provides "efficient dye-transfer inhibiting properties in the presence of H_2O_2." WO '787, page 3, ll. 5-6; page 4, ll. 33-35; see also WO '628, page 2, ll. 32-37; and page 4, ll. 30-31. Accordingly, we agree with the examiner that this teaching would have reasonably suggested using the bleach system of WO '628 or WO '787 with all laundry, including fabrics with fadeable dyes, to one of ordinary skill in this art.

---

[2](...continued)
definition referred to by the examiner on page 4 of the Answer at page 57, ll. 5-17, of the specification. We deem this citation error harmless since appellants have not challenged the examiner's interpretation of "substantially devoid."

Appellants argue that WO '628 and WO '787 disclose peroxygen bleach or peroxy-based or -generating bleach systems as essential elements (Brief, page 6). This argument is not well taken for two reasons. First, both references teach the alternative use of molecular oxygen as a bleach system and thus are not limited to the peroxy-generating system (see WO '787, abstract; page 1, ll. 15-17; page 4, ll. 7-9; WO '628, page 10, l. 36-page 11, l. 1). Second, the claims do not exclude peroxy-based bleaching systems, including up to 50% by molar weight of peroxy-based bleaches (Answer, page 4, citing the specification, page 23, ll. 20-30; see footnote 2 above).

Appellants argue that the references do not disclose the use of atmospheric oxygen, and the term "molecular oxygen" taught by the references would not be interpreted by those skilled in the laundry art as the same as "atmospheric oxygen" or even air (Brief, pages 6-11). This argument is not persuasive. Appellants have not proferred any objective evidence to support their argument. *See In re Scarborough,* 500 F.2d 560, 566, 182 USPQ 298, 302 (CCPA 1974)(Attorney's arguments are generally held to be insufficient to take the place of evidence or expert testimony). With regard to enablement (Brief, page 8), appellants have not shown that the alternative bleaching system using molecular oxygen, taught by WO

'628 and WO '787, would have required undue experimentation to practice the invention. In light of the reference disclosure, the burden is on appellants to establish that one of ordinary skill in this art would be unable to resort to routine experimentation to determine the optimum concentrations and process conditions for utilizing molecular oxygen as an alternative to peroxy compounds in a bleaching system. Accordingly, appellants' argument of non-enablement is not persuasive. *See Genentech, Inc. v. Nova Nordisk A/S*, 108 F.3d 1361, 1365, 42 USPQ2d 1001, 1004 (Fed. Cir. 1997).

We agree with the examiner that "oxygen is oxygen," whether the oxygen supplied is "sourced from the air" or other sources (Answer, page 4). Appellants have not established by convincing evidence or technical reasoning that "molecular oxygen" differs from other oxygen sources. As discussed above, we agree with the examiner that the claimed bleaching method is not devoid of peroxy bleach or peroxy-based or -generating bleach systems as the term "substantially devoid" is defined in appellants' specification. Additionally, since both references teach molecular oxygen as an alternative to peroxy compounds in a bleaching system, it would have been obvious for one of ordinary skill in this art to formulate a bleaching system comprising a mixture of peroxy compounds and molecular oxygen, which mixture is also within the

scope of the bleaching composition recited in the claimed method. *See In re Kerkhoven,* 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

For the foregoing reasons and those set forth in the Answer, we determine that the examiner has established a *prima facie* case of obviousness in view of the reference evidence. Based on the totality of the record, including due consideration of appellants' arguments, we determine that the preponderance of evidence weighs most heavily in favor of obviousness within the meaning of section 103(a). Accordingly, we affirm the examiner's rejections of claims 1, 2, 6-14 and 16 under 35 U.S.C. § 103(a) over WO '628 or WO '787.

B. The Rejection over Appel

The examiner finds that Appel discloses a bleach catalyst comprising an organic ligand complexed with a transition metal within the scope of the claimed bleach catalyst (Paper No. 4, pages 9-10). The examiner further finds that Appel teaches using this catalyst to bleach laundry fabrics with atmospheric oxygen which comprises contacting the stained fabrics in an aqueous medium with the bleaching composition, which is substantially devoid of peroxygen bleach or a peroxy-based or -generating bleach system (*id.*). The examiner further finds that the disclosure of "laundry" by Appel encompasses the fabric having "fadeable dyes" recited in

the claims (Paper No. 17, page 7; Answer, page 5). Accordingly, the examiner states that every limitation recited in the claims on appeal is described by Appel within the meaning of section 102 (Answer, page 5). We agree.

Appellants argue that Appel does not disclose fabrics bearing dyes which are susceptible to fading, nor does the reference appreciate the use of transition metal catalysts as important for preventing or reducing dye damage (Brief, page 11). These arguments are not persuasive for the following reasons. Appellants are correct that Appel does not specifically disclose fabrics with fadeable dyes as a laundry substrate (Brief, page 12) but the term "laundry" disclosed by Appel can reasonably be interpreted as encompassing white fabrics and fabrics with dyes (all dyes may be considered as "fadeable" to some extent). Disclosure of such a small genus would have put every species within this genus within the possession of the public, i.e., the disclosure of "laundry" describes each of the above listed species. *See In re Petering*, 301 F.2d 676, 681-82, 133 USPQ 275, 279-80 (CCPA 1972); *In re Schaumann*, 572 F.2d 312, 315-317, 197 USPQ 5, 8-9 (CCPA 1978); *and In re Sivaramakrishnan*, 673 F.2d 1383, 1384, 213 USPQ 441, 442 (CCPA 1982).

Appellants argue that not all laundry contains fadeable dyes but a very significant portion of the laundry is simply white fabric (Brief, page 12). Appellants further argue that fadeable dyes are not ubiquitous in laundry and in fact bleach systems are usually avoided when laundering such fabrics (*id.*). These arguments are also not persuasive. Appellants apparently admit that fabrics with fadeable dyes are a *portion* of laundry, even if not a significant portion. Accordingly, fabrics with fadeable dyes are a species of "laundry" (*see Petering, Schaumann and Sivaranakrishnan, supra*). Additionally, we note that Appel teaches that bleaching compositions are employed in "dye transfer inhibition," thus teaching the safe use of the disclosed bleaching system with fabrics bearing fadeable dyes (col. 19, ll. 19-20). Therefore, we determine that Appel describes every limitation of the method of claim 1 on appeal within the meaning of section 102. Accordingly, we affirm the examiner's rejection of the claims on appeal under 35 U.S.C. § 102(e) over Appel.

C. Other Issues

In the event of further or continuing prosecution before the examiner, the examiner should review the various applications and patents containing similar claimed subject matter that were the basis of obviousness-type double patenting rejections (Paper No. 4,

pages 11-13). It is noted that appellants' terminal disclaimer filed Sep. 13, 2001, Paper No. 8, only lists some of these patents and applications (e.g., U.S. Patents 6,617,299 and 6,638,901, issued from applications 09/539,756 and 09/796,210, respectively, are not listed in this terminal disclaimer).

D. Summary

The rejections of claims 1, 2, 6-14 and 16 under 35 U.S.C. § 103(a) over WO '628 or WO '787 are affirmed.

The rejection of claims 1-14 and 16 under 35 U.S.C. § 102(e) over Appel is affirmed.

The decision of the examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

TERRY J. OWENS Administrative Patent Judge	)	
THOMAS A. WALTZ Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
CATHERINE TIMM Administrative Patent Judge	)	

TAW/jrg

UNILEVER
PATENT DEPARTMENT
45 RIVER ROAD
EDGEWATER, NJ 07020